

## Claims

- [c1] 1. A method of manufacturing a color filter array, comprising the steps of:
- (a) forming a patterned first photoresist layer over a substrate, wherein the first photoresist layer has a plurality of openings with each opening exposing a portion of the substrate;
  - (b) forming a filter material layer over the exposed substrate within the openings;
  - (c) forming a second photoresist layer over the filter material layer;
  - (d) removing the first photoresist layer and the second photoresist layer to form a plurality of first color filter films; and
  - (e) repeating the steps from (a) to (c) at least once and removing the first photoresist layer and the second photoresist layer to form a plurality of second color filter films on the substrate in areas except the first color filter films.
- [c2] 2. The method of claim 1, wherein the step of forming the filter material layer over the exposed substrate within the openings further comprises covering the first

photoresist layer with the filter material layer.

- [c3] 3. The method of claim 2, wherein after carrying out step (c), further comprises:
  - (c1) removing the filter material layer over the first photoresist layer.
- [c4] 4. The method of claim 1, wherein the filter material layer has a thickness smaller than the first photoresist layer.
- [c5] 5. The method of claim 1, wherein the filter material layer has a thickness equal to the first photoresist layer.
- [c6] 6. A method of manufacturing a thin film on a substrate, comprising the steps of:
  - (a) forming a patterned first photoresist layer over the substrate, wherein the first photoresist layer has a plurality of openings with each opening exposing a portion of the substrate;
  - (b) forming a material layer over the exposed substrate within the openings;
  - (c) forming a second photoresist layer over the material layer; and
  - (d) removing the first photoresist layer and the second photoresist layer to form a plurality of thin films.
- [c7] 7. The method of claim 6, wherein the step of forming

the material layer over the exposed substrate within the openings further comprises covering the first photoresist layer with the material layer.

- [c8] 8. The method of claim 7, wherein after carrying out step (c), further comprises:
  - (c1) removing the material layer over the first photoresist layer.
- [c9] 9. The method of claim 6, wherein the material layer has a thickness smaller than the first photoresist layer.
- [c10] 10. The method of claim 6, wherein the material layer has a thickness equal to the first photoresist layer.